

QUARTERLY REVIEWS OF BIOPHYSICS

VOLUME 17 1984

Editors: A. Engström [*Sweden*], A. Ehrenberg [*Sweden*],
R. D. Keynes [*United Kingdom*],
G. Felsenfeld [*U.S.A.*]
W. Wüthrich [*Switzerland*]

Council of IUPAB

B. Pullman (France) <i>President</i>	
L. D. Peachey (U.S.A.) <i>Vice-President</i>	
K. Wüthrich (Switzerland) <i>Vice-President</i>	
R. D. Keynes (U.K.) <i>Hon. Vice-President</i>	
J. Tigyí (Hungary) <i>Secretary General</i>	
S. Asakura (Japan)	C. Hélène (France)
M. Baltscheffsky (Sweden)	G. R. Ivanitsky (U.S.S.R.)
M. Brunori (Italy)	K. C. Lin (Beijing, China)
L. C. M. De Maeyer (Belgium)	W. Reichardt (F.R.G.)
S. Estrada-O (Mexico)	R. Villegas (Venezuela)
W. Fuller (U.K.)	K. L. Wierzchowski (Poland)

Published for the International Union for
Pure and Applied Biophysics

Cambridge University Press 1984

Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
32 East 57th Street, New York, N.Y. 10022 USA
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

© Cambridge University Press 1984

Printed in Great Britain by the University Press, Cambridge

Contents

No. 1. FEBRUARY 1984

- JOHN E. HEARST, STEPHEN T. ISAACS, DAVID KANNE,
HENRY RAPOPORT and KENNETH STRAUB. The
reaction of the psoralens with deoxyribonucleic acid 1
- MÅNS EHRENBORG and C. G. KURLAND. Costs of
accuracy determined by a maximal growth rate
constraint 45
- J. R. ALGER and R. G. SHULMAN. NMR studies of
enzymatic rates *in vitro* and *in vivo* by magnetization
transfer 83

No. 2. May 1984

- OLLE EDHOLM, LENNART NILSSON, OTTO BERG,
MÅNS EHRENBORG, FLORA CLAESSENS, ASTRID
GRASLUND, BO JONSSON and OLLE TELEMAN.
Biomolecular dynamics: A report from a workshop in
Gysinge, Sweden, October 4-7 1982 125
- A. J. HOFF. Electron spin polarization of photosynthetic
reactants. 153

No. 3. AUGUST 1984

- ARIEH WARSHEL and STEPHEN T. RUSSELL.
Calculations of electrostatic interactions in biological
systems and in solutions 283

No. 4. NOVEMBER 1984

- C. R. WORTHINGTON. The structure of cornea 423
- JEFFRIES WYMAN. Linkage graphs. A study in the
thermodynamics of macromolecules 453